

ENVIRONMENTAL STATUS REPORT*

PROJECT/ACTIVITY DATA

Project/Activity Name:	SHOUHARDO III
Geographic Location(s) (Country/Region):	Bangladesh/Asia
Implementation Start/End Date:	September 2015-September 2020
Contract/Award Number:	AID-FFP-A-15-00009
Implementing Partner(s):	CARE
Link of Related IEE:	https://ecd.usaid.gov/repository/pdf/49111.pdf
Life of Award(LOA)	\$80,001,000

ORGANIZATIONAL/ADMINISTRATIVE DATA

DCHA Office:	Food for Peace
Lead BEO Bureau:	Democracy, Conflict and Humanitarian Assistance
Other Bureau:	Asia

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	FY18 PREP Environmental Status Report (ESR)*
Environmental Action Recommended:	Approved with Conditions
Categorical Exclusion:	X
Positive Determination:	
Negative Determination w/Conditions:	X
Deferral:	
CRM:	No analysis

USAID BUREAU ENVIRONMENTAL OFFICER APPROVAL

This Memo is to inform that the CARE SHOUHARDO III FY18 PREP Environmental Status Report (ESR) has been approved with conditions (below and Attachment 1) by the DCHA Bureau Environmental Officer (BEO), on April 16, 2018.

*The Environmental Status Report (ESR) is similar to the Environmental Mitigation and Monitoring Report (EMMR) used elsewhere in USAID. However, the ESR meets both purposes of reporting and budget planning for environmental compliance.

SUMMARY OF BEO CONDITION¹

The AOR will ensure that:

Condition: CARE must complete timely and comprehensive monitoring of gas levels during fumigation events.

¹ Required details pertaining to this Condition are found in Attachment 1.



USAID
FROM THE AMERICAN PEOPLE



Face sheet for Food for Peace Environmental Status Report
USAID / Dhaka/Bangladesh Mission

Activity/Project Title: Strengthening Household Ability to Respond to Development Opportunities III (SHOUHARDO III) Program	
Contract/Award Name(s) & Number(s) (if known): CARE Bangladesh, Award # AID-FFP-A 15-00009	
Geographic Location (Country(ies)/ Region/Global : Northern Bangladesh (Char and Haor)	
Operating Unit(s): DCHA Food for Peace	
ESR Year: 2018	IEE Number: Not Applicable
IEE Link: http://gemini.info.usaid.gov/document.php?doc_id=49111	
Amount of Dollar Funding Requested in the PREP: \$ TBD	
Amount of Commodity: \$ TBD	Life of Award (LOA): \$ 80,001,000
Project Start and End Dates: From 09/29/2015 to 09/28/2020	
ESR Prepared By: Md. Abdur Rashid, Advisor-Environment	Date Prepared: 15.08.2017
Implementing Partner(s): MJSKS, SKS, NDP, ESDO, DAM, POPI	Reporting due dates (if any):
Recommended Threshold Determination: <input checked="" type="checkbox"/> Categorical Exclusion <input checked="" type="checkbox"/> Negative Determination <input checked="" type="checkbox"/> With Conditions	<input type="checkbox"/> Positive Determination <input type="checkbox"/> Deferral

USAID APPROVAL OF ENVIRONMENTAL ACTION(S) for SHOUHARDO III:

Food for Peace, Mission (or Regional Office, as appropriate*):

Food for Peace Officer*  Date: 3/13/2018

Mission Environmental Officer*  Date: 03/13/2018

Food for Peace, Washington:

Agreement Officer's Representative Shahina Malik Date: 3/22/18

DCHA Bureau Environmental Officer Erika J. Clesceri Date: 4/16/2018

Regional Environmental Officer** _____ Date: _____

* FFP/M/R environmental officer clearance is mandatory; clearance by the FFP/M/R FFP officer is optional. **REO clearance is optional.

Table of Contents

1. Introduction –Background and Purpose.....	1
2. Environmental Compliance Management – Expertise and Staffing.....	1
3. Status of Environmental Compliance Management Documents.....	2
4. Activities Planned and Major Areas of Progress During FY 2017	3
5. Environmental Compliance Management in Implementation year FY 2018	5
6. Environmental Management Budgeting.....	7
6.1. Budget for Environmental Compliance Management (2016 – 2020).....	7
6.2. Detail Budget for Environmental Compliance Management (2016 – 2020)	8
7. Progress Status towards Achieving Environmental Compliance Conditions	9
7.1. DCHA BEO Conditions on ESR 2017	9
7.2. Status of Previous Conditions of DCHA BEO on Approved IEE or ESR	10
8. Environmental Mitigation and Monitoring (EMMP) Reporting.....	12
9. Lesson Learned in the year FY 2017	
Annex 1: Fumigation Management Plan (FMP) [A sample Copy of FMP]	
Annex 2: Fumigation Management Plan (FMP) Tracker [An updated Copy]	
Annex 3: Pesticide Management Plan (PMP) [An updated Copy]	

ENVIRONMENTAL STATUS REPORT (ESR) (OCTOBER 2017 – S E P T E M B E R 2 0 18)

1. Introduction: Background Statement

CARE Bangladesh's Strengthening Household Ability to Respond to Development Opportunities (SHOUHARDO) III is targeting the Poor and Extreme Poor (PEP) households with interventions related to improving livelihoods through increasing diversity and homestead production of nutritious foods with market accessibility, increasing off-farm and on-farm income generation and asset protection, small scale poultry production and goat rearing, improving household Health, Hygiene and Nutrition (HHN) behaviors with improved access to quality health and nutrition services including improved Water, Sanitation and Hygiene (WASH) infrastructures and services. The five-year program funded by the United States Agency for International Development (USAID) is also putting in place resilient livelihoods of targeted PEP people; improve disaster risk reduction strategies by increasing Disaster and Climate Risk Management capacity for communities, local government departments, institutions, and civil societies in the target areas. The program provides technical support to its six partner non-government organizations (PNGOs) which implement activities in 947 extreme and highly vulnerable villages in eight districts of Char and Haor regions where it aims to reach 674,856 PEP people¹.

2. Environmental Compliance Management (ECM) - Expertise and Staffing

Environmental compliance management (ECM) is embedded in the roles of technical coordinators in each of SHOUHARDO III's purpose, with overview and support of Advisor - Environment based in CARE Bangladesh's Dhaka Office. Specifically, at the regional level, ECM is carried out by infrastructure and environment officers both for CARE and PNGOs. Moreover, other field staff are trained on ECM who are also entrusted with responsibilities of managing environmental mitigation measures and monitoring issues relevant to agriculture and livelihoods; health, hygiene and nutrition; resilience, women empowerment and governance areas of the program².

2.1. Expertise and Staffing

Central level staffing: Advisor - Environment is responsible for designing and developing documents which includes preparing environmental screening and monitoring checklists, formats and guidelines to ensure that CARE regional staffs are oriented and aware of managing environmental issues. The Advisor is also responsible in establishing processes, which includes staff capacity development on overall environmental management issues, monitoring systems and reporting procedures on accomplishment of environmental compliance issues of SHOUHARDO III.

Field / Regional level staffing: Environment and infrastructure staff of CARE and PNGOs coordinate and oversee the implementation of program activities, facilitate operational and management procedures and ensure no harm to the environment with the program implementation at the region/field level. The monitoring and evaluation (M&E) team members also ensure that indicators specifically for environment

¹ Note: **Char** is the Bengali term for a mid-channel island that periodically emerges from the river bed as a result of accretion. The term is also used to refer to other land in the active river based flood plain that is subject to erosion and accretion. **Haors** are tectonic depressions located mostly in the northeast part of the country. These contain water year round, the depth and breadth of which expands enormously during the monsoon season.

² [Note: Environmental Compliance Management (ECM) is entrusted to diverse designated staff both at the CARE and Implementation Partners Non-Government Organizations (IPNGOs) with specific responsibilities at central and regional level. Central level CARE staff is for design and development of ECM mandatory documents and ensuring the applicability of those to implementing staff at regions by providing operational guidelines, trainings etc.] (Ref. ESR – 2017, Table 1: Environmental Compliance Management Staff – Designation with % of Level of Effort assigned to Environment).

are being tracked accurately and systematic process monitoring is in place. Other field-based staffs for both CARE Bangladesh and PNGOs such as the purpose-based Technical Officers, Regional M&E Managers and Warehouse Officers also conduct monthly monitoring and periodic reporting to Senior Technical Coordinator/Manager as specified.

3. Status of Environmental Compliance Management Documents

SHOUHARDO III prepared all required environmental compliance management documents as stated below following USAID relevant rules, regulations and policies. All of these documents were reviewed by concerned authorized personnel and approved by Bureau of Democracy, Conflict and Humanitarian Assistance (DCHA) of USAID.

3.1. Initial Environmental Examination (IEE) (approved by DCHA on 28.09.2016). All activities proposed in IEE are categorized into two groups following US Regulations 216 with recommended mitigation measures based on the assumed scale of environmental, climate resilience and socio economic impacts. Program activities categorized are as follows:

Environmental Threshold Decision, etc.: The potential environmental consequences of proposed activities have been categorized as per the IEE, following all relevant clauses and sub clauses of 22 Code of Federal Regulations (CFR) Environmental Regulation 216. As a result, considering the scale of environmental and social impacts, SHOUHARDO III adjusted its final design and implementation of each activity under the appropriate category as follows:

Categorical exclusion (no environmental effect) [Pursuant to 22 CFR 216.2(c) (2) (xiv), (iii)]: Recommended for those activities not expected to directly affect the environment, such as education, non-technical assistance and training, organizational development, research and analysis, coordination of activities, workshops and meetings, awareness sessions, nutrition and health care, maternal and child feeding, capacity building of local community members and local organizations, capacity building of Upazila level officials on the analysis of climate change impact at the local level and the development of early warning system.

Negative determination with condition [Pursuant to 22 CFR 216.3

(a) (2) (iii)] : Activities in this category are those that might have either minor or reversible negative environmental effects and recommended in the IEE with conditions requiring mitigation and monitoring to avoid adverse environmental impact.

3.2. Environmental Mitigation and Monitoring Plan (EMMP) (approved by DCHA on 19.05.2017). Activities classified as Negative Determination with Conditions are being tracked through SHOUHARDO III's Environmental Mitigation and Monitoring Plan (EMMP). The EMMP was designed to a) satisfy all mandatory conditions of mitigation measures recommended under the 'Negative Determinations with Conditions; b) design a monitoring method and sets out monitoring indicators c) specify key responsibilities of program staff as per schedule of those tasks with budgetary implications. Moreover, the EMMP has also provided an opportunity to ensure that activities proposed in the IEE conform to the environmental laws and policies of Bangladesh and the U.S. Federal Regulations, 22 CFR 216 along with other Rules and documents.

3.3. Safer Uses Action Plan (SUAP) – Pesticides Management Plan (PMP) (approved by DCH on 08.06.17). The USAID Pesticide Evaluation Report (PERSUAP) activities focus on the proper use of pesticides and IPM in agriculture, storage of agricultural commodities, livestock and poultry production

and fisheries as part of program implementation. Through the SUAP-PMP, it emphasizes and promotes Integrated Pest Management (IPM) methods that will minimize human health and environmental risks as well as pollution that can be brought by use of chemicals. The SUAP in brief provides a concise, definitive stand-alone statement of compliance requirements, which synthesized 12 factors of PER, reviewed and suited to the SHOUHARDO III program. As reported in the ESR matrix, 100 of participants practice safe disposal of waste materials.

3.4. Fumigation Management Plan (FMP) (approved by DCH on 08.06.17). The program reviewed the USAID PERSUAP and prepared its FMP describing necessary requirements of storage commodities management through fumigations work to address environmental consequences as per 22 CFR Reg.216.7 (iii). The recommended pesticides include Actellic, Agriphos, Dursban, Quick-Fume, Sanphos and Ustad that are all registered in the country as well as in US EPA. SHOUHARDO III prepared the FMP and maintains all requisite safety measures in each cycle of fumigation and reporting as well in environmental status report (ESR) each year.

3.5. Environmental Status Report (ESR). The program prepared and submitted the Environmental Status Report (ESR) for FY16 and FY17 which have been approved by the DCHA on 28th September 2016 and 16th March 2017 respectively.

4. Activities Planned and Major areas of Progress During - FY2017:

4.1. Design and Facilitation of Environmental Compliance Management Training (ECMT): SHOUHARDO III's Advisor - Environment prepared training materials and facilitated training to all staff both for CARE and six PNGOs involved in environmental compliance management of the program.³ The trainings were held in two batches for the two regions in October 2016. The training was designed to train staff on core concepts, approaches and regulations regarding ECM. The trainings also covered the implication of Environmental Policies, Acts and Rules of the Government of

Bangladesh, US Regulations 216 and other rules, policies as applicable to the environmental issues in the program. Contents of the training also included the natural resources management (NRM) and potential adaptations technologies i.e. floating garden and key whole gardening; Integrated Pest Management (IPM) based Pesticides Management Plan (PMP) and comprehensive monitoring plan of the recommended mitigation measures of diversified interventions.

4.2. Environmental Mitigation Management of Infrastructural Activities : During FY17, SHOUHARDO III constructed different types of small scales infrastructures that include 126 household latrines, 14 small scale drainage structures and 11 community resources centers (CRC). All these went through environmental screening process and managed various recommended mitigation measures as per EMMP. As evidence, for example, the latrines were constructed by maintaining safe distance (generally 30 feet) from the drinking water sources.



Group photo of participants of Environmental Compliance management training in Char region, October 2016. Photo: CARE



U-Drain construction has been deemed useful for discharging out the logged water to the low lying drained areas. Photo: CARE

³ Specifically, all Infrastructure and Environment officers (9 staff), Technical Officers for Agriculture; Health and Nutrition and Resilience (18 staff), Program Officers (4 staff), Monitoring and Evaluation Officers (3 staff), Technical Managers (2 staff), Regional Technical Manager (2 staff) and Senior Technical Coordinator – Resilience (2 staff) attended the training.

Raised plinth level was also constructed above Highest Flood Level (HFL), as well as hygienic pan and vent pipe were also added to minimize odor from latrines in the households. To augment this ‘hardware’ provision, the program also organized the ‘software’ part – through awareness-raising sessions with the participants on proper sanitation and hygiene regarding the use of latrines, which include topics on water flushing, cleaning after latrine use. U-drain type of small scale drainage construction i.e. the cross drainage culvert installed in the village road has been deemed useful for discharging out the logged water to the low lying drained areas. Earth compaction and grass turfing were also done to protect the slopes and excavated areas from soil erosion. These drains were observed to be effective in discharging and facilitating surface water flow to avoid the damages of rural roads. Moreover, the homestead plinth raising, community ground raising and earthen road maintenance work were also done to protect community people and their livelihoods especially during disaster. These constructions elevate the houses, planting areas and roads that help save the people in the communities in times of flooding.

4.3. Organizing Fumigation Management Training and Demonstration: In FY17, the program organized and provided training in two regions for warehouse commodity and fumigation management staff (30 participants) to ensure the process in place is done properly and skillfully following the recommended compliance issues. In addition, the program also demonstrated the sand snakes’ preparation and placing around each stakes in double rows undertaking and considering all safety measures, conceptualizing of Materials Safety Data Sheets (MSDS) and updating process of hazard monitoring log sheets during the fumigation period. In the upcoming FY, the program will also provide orientation as mandatory refreshers on fumigation management to all concerned staff and fumigators responsible for warehouse and commodity management.



Fumigation management training and demonstration conducted in Kurigram held in July 2016. Photo: CARE

4.4. Regular Maintenance work and IPM practices of warehouses: During the reporting period, regular maintenance and repair work for all the eight warehouses (one per targeted district in Char and Haor regions) continued which included activities like installation of fire safety equipment, maintenance of roof, wall, plinth areas, doors, windows, ventilation facilities as well as security and safety arrangements. The program enhanced and arranged for practicing IPM like hanging Neem Leaf (*Azadirachta indica*) and putting in place rat traps, routine cleaning, sweeping of floors, repairing of floor cracks / hair cracks and plastering of walls and ventilators.

4.5. Ensuring safety measures and equipment during Fumigation Period: The program ensured that necessary safety equipment are in place for staff like using hand gloves, helmets, gumboots, eye Glasses and respiratory gas masks as required for fumigation in each warehouse. As well, hazard monitoring and recording with phosphine gas detector to detect emissions, if any, were done in each fumigation cycle.

4.6. Enhance Energy Efficient Fuel Wood Consumption Awareness Program (FCAP): Energy efficient Fuel Wood Consumption Awareness Program (FCAP) as proposed in program IEE, is implemented to build community awareness and demonstrate use of Improved Cooking Stove (ICS) support to selected beneficiaries – particularly those who received food rations and their family members. The aim of awareness building activity is to reduce respiratory problems, headache and eye irritation brought by less indoor smoke emission, less fuel wood consumption which in the



SHOUHARDO III provides improved cooking stove support to its participants. Photo: CARE

long run increase household income. The program facilitated awareness raising sessions to each community-based groups by describing: a) advantages and disadvantages of planned and unplanned cooking practices; b) importance of using fuel efficient/improved stoves; and c) possible adverse impact on human health, natural resources and household expenses in case of using extra fire wood for unplanned cooking.

5. Environmental Compliance Management in Implementation year FY18

5.1. Capacity Enhancement on Environmental Compliance Management: In FY18, the program will conduct staff capacity building and orientation on overall ECM. This will cover the implication of environmental policies, Acts and Rules of the Government of Bangladesh, US Regulation 216 and other rules as applicable to the program. Topics will mainly include infrastructure construction activities such as screening, planning, and implementation of proposed activities in IEE and EMMP; IPM-based pesticide management; natural resources management and climate smart adaptation agricultural technologies; compost preparation and uses; ground water arsenic assessment and safe water supply, fuel wood consumption and community awareness; health, hygienic and nutrition support and commodity management that includes fumigation aspects.

5.2. Environmental screening and mitigation measures monitoring: Field level environmental screening of different types of infrastructure and non-infrastructure interventions with monitoring of recommended mitigation measures will be undertaken. The program will ensure that environmental assessment and mitigation monitoring will be undertaken in the planning and implementation process of household latrine installation (for 475 households), U-drain construction (19 units), low CRC construction (150 units), school cum flood shelter construction / maintenance (8 schools) and mound (village) protection wall construction (6 communities) using USAID approved format.

5.3. Commodity fumigation management: SHOUHARDO III has the Fumigation Management Plan (FMP) for eight warehouses during the FY18 with 65–75 days intervals for each fumigation cycle (45 fumigation cycles of 8 warehouses for one year). In compliance, all FMP will be implemented in each warehouse for sharing, if required, with USAID Mission Environmental Officer (MEO) for necessary review and concurrence. Moreover, the program will arrange commodity management and sharing workshop/orientation for all warehouse staff and fumigators emphasizing on phosphine gas fumigation procedures, safety measures and IPM practices before the fumigation of commodities following conditions attributed in Programmatic Environmental Assessment (PEA), [Annex – I: Sample Fumigation Management Plan (FMP) attached].



5.4. Orientation on arsenic, safe water and sanitation: The capacity development orientation for program staff, implementing partners and front line workers on access to safe water supply and arsenic assessment issues will also be organized with the aim of sharing and disseminating safe water, arsenic and sanitation messages to community members as an awareness raising initiative for accessing safe water as well as ensuring hygienic sanitation practices.



5.5. Ground water arsenic assessment: In FY18, SHOUHARDO III will undertake ground water arsenic assessment, community awareness and advocacy work through a collaborative approach with the Department of Public Health Engineering (DPHE) of the Government of Bangladesh. In this regard, the

program will organize Union Parishad Water and Sanitation (WATSAN) committees, local public institutions and other non-government organizations concern on WASH support following the strategic directions as stated in the Water Quality Assurance Plan (WQAP) developed earlier during this year by the program.

5.6. IPM based pest and pesticide management training: Pesticide management training / refresher will be organized for relevant technical staff of both CARE and PNGOs to review the status of community awareness in IPM practices and proper safety measures, among others. Core messages on the safer uses of pesticides and adaptation of IPM practices will be communicated to community based farmers engaged in homestead vegetable gardening, floating gardening, crop cultivation, fish culture, livestock rearing and other agro-income generating activities.

5.7. Awareness on energy efficient Fuel Wood Consumption Awareness Program (FCAP): In FY18, the program will continue Fuel Wood Consumption Awareness Program (FCAP) with the community based different groups in each of the 947 villages. This initiative will also be monitored through standard site visit form (*Ref. following the EMMP Approved Standard Site Visit Form # 5.16*).

5.8. Implementation of floating gardening under Natural Resources Management (NRM) and Eco System based Adaptation Program: The program planned and implemented community-based floating garden as an initiative of household resilience enhancement under natural resources management program. In FY18, the program proposed for implementing such initiative in 25 villages of Haor areas with possible extension / exploration in deep beel, depressed areas, closed water bodies and ditches in feasible villages of Char areas.

6. Environmental Management Budgeting

6.1. Budget for Environmental Compliance Management for FY 2016 – FY2020

SHOUHARDO III has the necessary budget for environmental impact management over the life of the program and is broadly allocated to cover all proposed activities in this manner:

- Environmental mitigation measures of infrastructure activities (3% of infrastructure budget) planned to ensure implementation and management for proposed mitigation measures.
- Capacity building on safe uses of pesticides management by Agriculture, Comprehensive Homestead Development (CHD) and Income Generating Activities (IGA) participants.
- Capacity building training and workshop, community awareness, commodity fumigation, arsenic and safe water and improved cooking stoves support.
- Climate change adaptation initiatives like energy efficiency awareness raising, improved cooking stoves, ground water arsenic assessment, floating garden, biodiversity and natural resources management activities.
- Environmental compliance management staff salary and benefits (*In built in 202e code of PREP18 budget*)

6.2. Detail Budget for Environmental Compliance Management FY2016 – FY 2020

Sl.	Proposed Activities	FY2016 (US \$)	FY2017 (US \$)	FY2018 ⁴ (US \$)	FY2019 (US \$)	FY2020 (US \$)
01	Provide knowledge, technology and input/technology support (i.e. improved cook stoves)	0	11,685	23,923	10,000	0
02	Infrastructure environmental mitigation management (3% infrastructure cost)	859	21,902	22,459	15,408	3,569
03	Environmental Compliance Management Training (ECMT)	4,950	5,197	5,319	5,730	6,016
04	Environmental Compliance Management Lesson learn and review workshop at	0	0	1,000	1,000	1,000
05	Tube well arsenic assessment by short term volunteers under DPHE collaborative approach. (Honorarium and	0	0	12,500	0	0
06	Tube well Arsenic Assessment Field test Kits (HACH KIT)	0	10,000	20,000	0	0
07	Conducting Community Tube well Arsenic Test in SHOU III Program villages in char and haor areas through DPHE collaboration (Material printing)	0	0	625	0	0
08	Arsenic Lab test for 2% arsenic contaminated TW in DPHE Zonal	0	0	1,250	500	0
09	Coliform Lab test for 2% arsenic contaminated TW in DPHE Zonal laboratories	0	0	1,250	500	0
10	ToT on arsenic test procedures and safe water supply to CARE and PNGO staff at regions (Char 2, Haor 2 sessions)	0	0	1,250	1,250	0
11	Training on arsenic test procedures and safe water supply to FF, selected volunteers and DPHE Technicians at each PNGO (Char 4, Haor 2 sessions)	0	0	2,500	0	0
12	Facilitating community based arsenic and safe water supply awareness sessions by CHV/DPHE technicians	0	0	12,000	12,000	5,000
13	Arsenic tested TW data base preparation for 30000 Tube well test.	0	0	1,875	500	0
14	Advocating with WATSAN Committee members, MPs, Upazila chairman and DPHE for TW to PEP.	0	0	625	625	500
15	ECM Lesson Learned and Review workshop at the Central level	0	0	1,147	625	625
16	TOT on Fuel Wood Consumption Awareness Program (FCAP)/ Refresher	0	515	525	525	525
17	Community based Fuel Wood Consumption Awareness Program	0	0	3,556	3,556	2,000

⁴ Budget for FY 18 shown in highlighted column (3rd column) of the table, may adjusted in necessities.

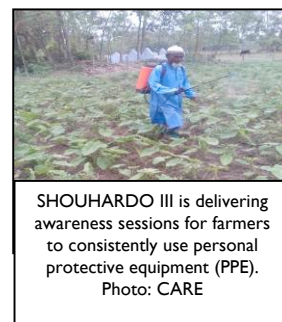
18	School and Flood shelter construction in flood prone areas	0	0	266,613	143,396	75,283
19	Brick mound protection wall construction in Haor in the areas of highest vulnerability	0	0	499,936	179,245	0
20	Cash for Work (CFW) schemes (like Homestead plinth raising, community ground raising, and road maintenance.	0	135,484	142,258	149,371	0
21	Demonstrations of low cost household latrine	12,387	19,306	20,272	21,285	22,350
22	Low cost community resource center (CRC) construction	0	182,903	192,048	0	0
23	Pipe culvert/U-drain construction	16,258	17,071	17,925	18,821	19,762
24	Training of Warehouse staff and Fumigation vendor	58,000	58,000	58,000	58,000	0
25	Commodity fumigation cost	9,467	33,083	41,065	19,576	7,011
26	Fumigation and Safety Materials and Warehouse Maintenance	20,000	1,000	1,000	500	0
27	WH Safety security and fumigation and fire drill training at region	30,935	30,935	30,935	30,935	0
28	WH Renovation / maintenance work	20,000	1,000	1,000	1,000	0
#	Total (US \$ 2,901,782)	172,856	528,081	1,382,856	674,348	143,64

7. Progress Status toward Achieving Environmental Compliance Conditions

7.1. Conditions of DCHA BEO on ESR 2017

Condition 1: CARE must wait for the SUAP to be approved before any pesticide activities can commence: DCHA Bureau Environmental Officer approved both SUAP PMP and FMP on June 8, 2017. To comply the condition 1, CARE obtained pre-approval for interim period from DCHA BEO for warehouse storage commodity fumigation soon after infestation was observed in commodity stakes. CARE, at present, is conducting storage commodity fumigation under the DCHA BEO approval with USAID recommended pesticides and complies with all possible safety measures stated in the approved Fumigation Management Plan (FMP), [Annex - I., a sample FMP).

In this regard, pesticides that are traditionally being used in agriculture activities by farmers are discouraged (see *photo of pesticide users without protective measures*) by the program. Instead, awareness raising on Integrated Pest Management (IPM) practices (Ref. DCHA DEO ESR 17 condition # 1: reflecting planned beneficiary training and using SUAP tracker, etc. on IPM), applying organic fertilizer (household based compost) and other indigenous pest management methods were put in place. These include use of protective apparels and practice of necessary safety measures by farmers involved in vegetables and crop production.



SHOUHARDO III is delivering awareness sessions for farmers to consistently use personal protective equipment (PPE).
Photo: CARE

Condition 2: CARE must submit the Water Quality Assurance Plan (WQAP): CARE Bangladesh SHOUHARDO III prepared and submitted the WQAP to the USAID mission on 30 May 2017 and undertakes the tube well arsenic assessment,

community awareness and advocacy work under CARE – DPHE collaboration for the FY17 – FY20.

Condition 3: CARE must submit mitigation measures for the operation and maintenance of activity 5.2.8 Construction of low cost Community Resources Center (CRC) in the PREP FY18 ESR:

The program undertakes all possible mitigation measures in the construction of proposed 150 CRCs this year. The collected soil came mostly from unproductive land, ditches, canals and ponds. Agricultural fertile land were avoided, compact earth were put over plinth and slope areas, dust control was maintained by water spraying, plantation and vegetative measures were undertaken and site protection measures with palisades were also put in place. Moreover, a pre-construction period briefing on possible safety measures were arranged for masons, technicians and laborers; stocks construction materials were ensured to be in safe corners to avoid any accidental risks; rain cuts and land holes were filled; cleaning and collection of waste materials were also done and burns or dumps carefully outsides CRC premises.



Community Resource Center (CRC) with raised plinth, proper earth filling, construction waste cleaning and earth compaction. Photo: CARE

7.2. Status of Previous Conditions from IEE or ESR 2017:

Summary of DCHA BEO Conditions CARE Bangladesh SHOUHARDO III submitted Initial Environmental Examination (IEE) and ESR with the FY16 PREP were approved on 28 September 2016. These went through all necessary Mission and Washington clearances for 22 CFR 216 requirements and placed conditions and recommendations on CARE to fully meet the conditions. The program has taken necessary actions since beginning of FY17 with the summary below:

CARE's specific concerns/actions on the DCHA BEO conditions and approved IEE recommendations (Progress statement in FY 2017):

DCHA BEO Conditions and Recommendation on IEE	CARE Specific Concern / Action (Progress Status during the current year)
Condition: 1: CARE will need to submit SUAP for DCHA BEO and MEO approval before pesticide related activities can commence.	CARE SHOUHARDO III prepared and submitted the SUAP (PMP and FMP) for USAID mission review and obtained approval of DCHA BEO on June 8, 2017.
Condition: 2: CARE must submit copies of any completed FMPs with future Environmental Status Reports.	DCHA BEO approved detail FMP prepared for warehouse storage commodity fumigation management. FMP of each warehouse is prepared well ahead of each fumigation cycle. A specific and completed FMP (for a cycle of one warehouse fumigation as sample) attached herewith the ESR 18 as annex -I.
Condition 3: CARE must provide greater detail on the scale of irrigation activities to the DCHA BEO through the AOR.	Comprehensive Homestead Development (CHD) plan by small scale homestead vegetable gardeners who adopt traditional drip irrigation by ferrying jar / bucket water from nearby water sources. Using locally practiced methods to collect water is not assumed to have adverse environmental impacts on soil and water contamination.

DCHA BEO Conditions and Recommendation on IEE	CARE Specific Concern / Action (Progress Status during the current year)
Condition 4: CARE must develop and provide the DCHA BEO a Water Quality Assurance Plan, including at least arsenic and fecal coli forms, to address water contamination concerns.	CARE has completed / prepared the Water Quality Assurance Plan (WQAP) in compliance with USAID Sector Environmental Guidelines for Water Supply and Sanitation', stating the arsenic and fecal coli form assessment plan to be undertaken through CARE – DPHE collaboration for addressing water contamination concerns and submitted USAID mission on May 30 2017
Condition: 5: If activities may, affect protected or internationally significant wetland areas, CARE will need to complete a Scoping Statement for an Environmental Assessment.	SHOUHARDO III program regions selected do not have protected or internationally recognized wetlands. None of the planned activities will be adversely affected or be harmful to the soil, water, species or livelihoods of the community. However, the program, undertakes scheme screening and monitoring to find if any adverse impact observed.
Condition: 6: CARE will need to work with the MEO to establish clear mitigation measures for operation and maintenance of construction-related activities into a revised EMMP. Revised EMMP will need to be submitted with the next ESR for DCHA BEO approval.	CARE working closely with the MEO by sharing mitigation measures for the operation and maintenance of construction-related activities. Addressed necessary feedback of mission MEO on revised EMMP submitted earlier and obtained DCHA BEO approval with comments as 'well thought' document - on 05/19/2017.
Condition: 7: CARE must work closely with the MEO to update the EMMP to cover activities that are misclassified. This updated EMMP must be complied and submitted with CARE's next ESR for DCHA BEO approval.	CARE SHOUHARDO III program reclassified tasks and updated those in EMMP, submitted to USAID and received DCHA BEO approval in this reporting year.
Condition: 8: CARE must ensure the appropriate disposal of and management of hazardous medical waste and promote best environmental practices. Mitigation measures for misclassified activities must be included in a revised EMMP and be submitted with the next ESR for DCHA BEO approval.	CARE provided a detailed fumigation management orientation to all commodity management staff and fumigators on safe disposal of waste materials, in an environmentally friendly manner. Managing fumigation waste and spent materials disposals were done properly following USAID PERSUAP and PEA guidelines. Training and awareness sessions were organized with participating farmers on safe disposal of chemical residuals, empty packages/containers, if by natural, uses such chemicals. The program has continuous effort of encouraging farmers on IPM practices. Emphasis is given on monitoring any chemical pesticides uses and revisiting it in the program meetings and discussions.

DCHA BEO Conditions and Recommendation on IEE	CARE Specific Concern / Action (Progress Status during the current year)
Condition: 9: A new and improved ESR format for annual environmental reporting is described in the FY2016 FFP RFA IEE and should be considered for use by CARE for future ESR submissions.	CARE uses the FY2016 FFP RFA IEE format and prepared ESR FY 18 to submit as per recommendation of condition # 9 for USAID approval.
Condition: 10: CARE must ensure that sufficient funds are allocated to ensure environmental compliance and provide updates on their environmental budgeting during annual reporting.	CARE has budget allocation and updated (Ref. Budget for ECM in Table – I) with the inclusion of new activities and implementing all proposed mitigation measures as described in the budget section of the ESR FY 18. The budget can also be adjusted to fit the future needs of environmental management.
Recommendation I: CARE should consider planning options for climate screening and sensitivity during implementation in accordance with upcoming requirements of the US Presidential Executive Order 13677.	CARE has the provision of schemes planning through community based screening process during the planning period for implementation of climate resilience agricultural technologies, support for diversification in crop varieties, improve cooking stove demonstration and energy efficient Fuel Wood Consumption Awareness Program (FCAP), improved safe water sources, compost preparation and uses to retain soil fertility, awareness on early warning systems and natural resources management initiatives.

8. Environmental Mitigation and Monitoring (EMMP) Reporting.

8.1. Monitoring Follow up Actions of EMMP: The program will monitor potential impacts of recommended mitigation measures recommended in EMMP for Negative Determination with Condition, Pursuant to 22 CFR 216.3 (a) (2) (iii). This will be done through pre-designed monitoring formats and checklists in keeping with the program's M&E plan and ensure that mitigation measures are being implemented and managed properly. The program trained staff on the EMMP through orientation with demonstration of environmental monitoring process, formats and checklists.

8.2. Involvement of Community Members: SHOUHARDO III program ensures the involvement of participating community members in the planning, implementation and monitoring process of the recommended mitigation measures through preparation and continuous monitoring of Community Action Plan (CAP). Furthermore, the program ensures, where possible, the participation of local communities in earth cutting and lifting activities to avoid the destruction of valuable and fertile agricultural land. Community members are also involved in various community based awareness raising initiatives on WASH, energy efficient fuel wood consumption and improved cooking stove use, involving IPM and practices in home stead, floating vegetable garden and field crop activities. SHOUHARDO III also facilitated village-based awareness sessions on safe use of chemical fertilizer and its negative impact on environment. This initiative has been integrated in respective purpose-based awareness raising modules of the program. The sessions are delivered to each community groups and in various public events.

8.3. Integration into Performance M&E: To mitigate all recommended mitigation measures as was indicated in the program IEE, a comprehensive EMMP has been developed for all negative determination with conditions (NDCS), pursuant to 22 CFR 2163 (a) (2) (iii). All recommended activities (Ref. Annex – 2 of Environmental Mitigation and Monitoring Plan (EMMP) summary table) essentially monitors under SHOUHARDO III's M&E plan and guides to ensure recommended mitigation measures are being implemented and managed properly to maintain environmental regulatory and standards following both integrated and stand-alone indicators proposed in EMMP.

8.4. Integration of Environmental Compliance Management (ECM) with the Program Operational Procedures: ECM activities have been implemented through an integrated approach with relevant activities of agriculture and livelihood, health, hygiene and nutrition, infrastructure and ecosystem based management initiatives. In this regard, implementation of potential activities essentially undergo through necessary environmental screening processes, addressing necessary mitigation measures and monitoring those to maintain quality standard in compliance. In implementing all activities as planned, the program provides orientation and necessary technical support on ECM aspects to CARE and PNGO staff, field facilitators and volunteers to transfer essential knowledge and awareness messages to community for action.

9. Lessons Learned in FY17:

a. Environmental compliance is crucial and cross-cutting for all purposes of SHOUHARDO III. It is in this light that appropriate systems should be in place, with support and cooperation of all concerned staff. To achieve this, the program focused on providing capacity development training and learning sharing sessions, including that for the volunteers. Advisor - Environment, with support of management at Dhaka and field levels attended the capacity building sessions himself to guide them step-by-step and to ensure grasp of technical information regarding environment matters. Consultations were conducted prior the training to identify who would benefit the most among the staff, to maximize efficiency in carrying out environment-related tasks. This enhanced the engagement of concerned staff in integrating environment compliance for all purposes. Commodity and infrastructure staff, as well as fumigators in particular were mainly engaged in the training sessions as they are the ones who are engaged directly in environment-related implementation.

Moreover, to further enhance engagement and understanding of the staff from Dhaka to the field levels, all activities related to Environment are discussed thoroughly in different channels appropriate for them to address any issue or difficulty in compliance. Out of these discussions, the staff and volunteers identified benefits including better health and hygienic environment, markets for organic produce, IPM practices in vegetable and crop production that would allow future generations to continue to benefit from available natural resources. This became the venue to discuss environment-friendly approaches and their benefits for the whole community. As members of the communities themselves, the volunteers were able to bring up matters that would work best for the community. Thus far, there has been consistent buy-in of approaches in the communities and appreciation on the benefits of environmental compliance in SHOUHARDO III activities.

b. SHOUHARDO III maximizes all options available to merge activities that would contribute to integration as its approach. In this regard, environment matters were included in the local level planning of the community action plan (CAP). While this is an exercise under Purpose 3 (Resilience), this became an appropriate venue to identify ways forward for environmental compliance and strengthen on environment-friendly program activities that are in place. The planning process involved discussing concerns of assessing local flooding, erosion, droughts and sanitation, among others. With the

participation of the community members themselves, they were informed of advantages and benefits of IPM, waste management and importance of putting in place structures like latrines, drainage systems and CRCs. To support this, during field visits and meetings, the participants in the communities were motivated to ensure environmental mitigation measures like earth compaction, water spraying, grass turfing, plantation and vegetative measures were in place during homestead raising, U drain and CRC construction activities.

c. Learning-by-doing approach has helped farmers maximize use of compost as fertilizers. While it is a reality that farmers are not always available to attend the sessions not just on environment but other sessions, the program reached out to them by going to the farms themselves, discuss and demonstrate how the process is done. As well, SHOUHARDO III acknowledges that this will not happen overnight, as farmers are used to apply chemical fertilizer and pesticides because they are easily available, affordable and instantly increase production volume. To augment the provided information on the benefits of composting, the program staff worked with farmers closely to set up demonstration plots to show how to prepare and apply compost to their crops. This helped farmers to realize that this initiative is not expensive nor time consuming and can bring various types of benefits that would increase soil fertility, health benefits and save their household income from buying chemical pesticides in the long run to be used in other important matters.

ATTACHMENT 1

Note: The following provides detailed explanations supporting the required Condition for the Environmental Status Report (ESR) approval by the DCHA Bureau Environmental Officer. The AOR will ensure that the awardee responds to the BEO Condition, as described.

DETAILS FOR BEO CONDITION :

Issue: Improper gas level monitoring during fumigation could lead to negative environmental impacts.

Discussion: The DCHA BEO thanks CARE for providing an illustrative Fumigation Management Plan (FMP) from a fumigation event that occurred on November 30, 2016. It was observed that the section on gas monitoring (table on page 12) was left blank without explanation, although the gas monitoring device was noted as available and in use by the fumigation service provider (FSP).

As noted in the [USAID Fumigation Programmatic Environmental Assessment \(PEA\)](#), applying and attaining proper gas levels during fumigation practices is paramount to the effectiveness of the treatment. Levels exceeding designated limits can harm human health and insufficient gas levels can lead to pest resistance. Low levels are found when either not enough phosphine gas is applied or when there are leaks in the material used to seal the structure, via holes or the material being too permeable. If gas leaks before it reaches a sufficiently high concentration to kill all the insects, spoilage and insect resistance can occur.

Insufficient gas levels or leaky storage conditions that lead to shortened fumigation times may allow insects with the highest tolerance to phosphine to survive. Insect resistance that has built up over time has dramatically reduced the effectiveness of phosphine as a fumigant. The inefficacy of phosphine fumigants may represent a serious threat to the world's food-stocks due to increased and more frequent pest outbreaks. It is imperative that phosphine gas is administered at proper levels to ensure safety and efficacy. Therefore, proper and frequent monitoring of gas levels is necessary.

Condition: CARE must complete timely and comprehensive monitoring of gas levels during fumigation events.